

Draft only

1. (currently amended): A piezoelectric pump drive circuit comprising:

a sine wave oscillation means for generating a sine wave signal of the frequency that drives a piezoelectric element of a piezoelectric pump;

a voltage-boosting means for converting a low-voltage supplied by one of a 5VDC power supply and a ~~at~~ approximately 12VDC power supply or less to a high voltage of one of ~~from~~ approximately 140VDC to and approximately 280VDC; and

an amplification means driven by the high voltage generated by said voltage-boosting means for amplifying the signal supplied as output from said sine wave oscillation means and for driving said piezoelectric element by a high-voltage sine wave;

wherein said amplification means is composed of: a D-class amplifier driven by a high voltage generated by said voltage-boosting means for subjecting the signal supplied as output from said sine wave oscillation means to pulse-width modulation to realize amplification; and a low-pass filter for demodulating the output signal of said D-class amplifier.

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Re: USPN 10/590,081